

## WHAT IS CLAIMED IS:

1. An apparatus for controlling a plurality of hydraulic motors and a clutch in which a single driving shaft is driven by outputs of a plurality of hydraulic motors, and one of the plurality of hydraulic motors drives the driving shaft through the clutch, comprising:

zero tilt rotation fixing means for fixing the tilt rotation amount of a first hydraulic motor to zero when a zero fixing pressure ( $P_{cs}=P_f$ ) of a predetermined value is input;

a clutch that is disengaged when a release pressure ( $P_k$ ) of a predetermined value that is larger than the zero fixing pressure ( $P_f$ ) is input;

hydraulic vehicle speed detecting means for detecting a vehicle speed by a vehicle speed signal pressure ( $P_v$ ) based on a vehicle speed; and

control valve means that releases an output command pressure ( $P_{cs}$ ) to a return pressure ( $P_t$ ) connected to a tank until a vehicle speed signal pressure ( $P_v$ ) received from the hydraulic vehicle speed detecting means reaches a start pressure ( $P_b$ ) of a predetermined value, and begins to output the command pressure ( $P_{cs}$ ) to the zero tilt rotation fixing means and the clutch when the vehicle speed signal pressure ( $P_v$ ) exceeds a predetermined value.

2. An apparatus for controlling a plurality of

hydraulic motors and a clutch in which a single driving shaft is driven by outputs of a plurality of hydraulic motors, and one of the plurality of hydraulic motors drives the driving shaft through the clutch, comprising:

a first servo valve that controls the tilt rotation amount of a first hydraulic motor, and sets the tilt rotation amount of the first hydraulic motor to a zero tilt rotation amount when a zero fixing pressure ( $P_{cs}=P_f$ ) of a predetermined value is input;

a clutch that is disengaged when a release pressure ( $P_k$ ) of a predetermined value that is larger than the zero fixing pressure ( $P_f$ ) of the predetermined value is input;

hydraulic vehicle speed detecting means for detecting a vehicle speed by a vehicle speed signal pressure ( $P_v$ ) based on a vehicle speed; and

control valve means that releases an output command pressure ( $P_{cs}$ ) to a return pressure ( $P_t$ ) connected to a tank until a vehicle speed signal pressure ( $P_v$ ) received from the hydraulic vehicle speed detecting means reaches a start pressure ( $P_b$ ) of a predetermined value, and begins to output the command pressure ( $P_{cs}$ ) to the first servo valve and the clutch when the vehicle speed signal pressure ( $P_v$ ) exceeds a predetermined value.

3. An apparatus for controlling a plurality of hydraulic motors and a clutch in which a single driving shaft is driven by outputs of a plurality of hydraulic motors, and

one of the plurality of hydraulic motors drives the driving shaft through the clutch, comprising:

a first servo valve that controls the tilt rotation amount of a first hydraulic motor, and sets the tilt rotation amount of the first hydraulic motor to a zero tilt rotation amount when a zero fixing pressure ( $P_{cs}=P_f$ ) of a predetermined value is input;

a zero tilt rotation detecting valve that detects the tilt rotation amount of the first hydraulic motor, and causes a command pressure ( $P_{cs}$ ) to be in communication with the clutch to disengage the clutch when the zero tilt rotation amount is detected;

hydraulic vehicle speed detecting means for detecting a vehicle speed by a vehicle speed signal pressure ( $P_v$ ) based on a vehicle speed; and

control valve means that releases an output command pressure ( $P_{cs}$ ) to a return pressure ( $P_t$ ) connected to a tank until a vehicle speed signal pressure ( $P_v$ ) received from the hydraulic vehicle speed detecting means reaches a start pressure ( $P_b$ ) of a predetermined value, and begins to output the command pressure ( $P_{cs}$ ) to the first servo valve and the zero tilt rotation detecting valve when the vehicle speed signal pressure ( $P_v$ ) exceeds a predetermined value.

4. An apparatus for controlling a plurality of hydraulic motors and a clutch in which a single driving shaft is driven by outputs of a plurality of hydraulic motors, and

one of the plurality of hydraulic motors drives the driving shaft through the clutch, comprising:

zero tilt rotation fixing means for fixing the tilt rotation amount of a first hydraulic motor to zero when a zero fixing pressure ( $P_{cs}=P_f$ ) of a predetermined value is input;

a clutch that is disengaged when a release pressure ( $P_k$ ) of a predetermined value that is larger than the zero fixing pressure ( $P_f$ ) is input;

hydraulic vehicle speed detecting means for detecting a vehicle speed by a vehicle speed signal pressure ( $P_v$ ) based on a vehicle speed; and

control valve means that outputs an output command pressure ( $P_{cs}$ ) to the zero tilt rotation fixing means and the clutch when the vehicle speed signal pressure ( $P_v$ ) received from the hydraulic vehicle speed detecting means is larger than a predetermined value ( $P_b$ ), while it begins to release the command pressure ( $P_{cs}$ ) to a return pressure ( $P_t$ ) connected to a tank when the vehicle speed signal pressure ( $P_v$ ) becomes smaller than the predetermined value ( $P_b$ ).